

Consumer Confidence Report for year of 2003

Annual Drinking Water Quality Report

City of Newton

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The City of Newton proudly presents this year's Annual Quality Water Report. Details of this report highlight both the quality of water and service the City currently provides. If have any questions regarding the contents of this report, or general questions regarding your water service, please contact Tim Abernethy, at 695-4312.

Where does Newton's Water Come From?

The Jacobs Fork River is the primary water source for Newton's drinking water. The Jacobs Fork flows approximately 20 miles over solid bedrock where it is well oxygenated and most volitales are removed. The Jacobs Fork River has no commercial or city discharge facilities located along its 20-mile stretch adding to the purity of the water.

How is Newton's Water Treated for Drinking Purposes?

Source water from the Jacobs Fork River is treated at The City of Newton Water Treatment Plant. During treatment, source water undergoes a series of processes: coagulation, sedimentation, filtration, and disinfection.

Coagulation--chemicals are mixed into the water to form a solid material around small particles in the raw water, causing them to clump together.

Sedimentation--particles settle to the bottom of large settling tank and then removed.

Filtration--water flows through filters of carbon and sand to remove any remaining particles.

Disinfection--chlorine is added to disinfect the water.

What You Need to Know About Your H₂O.

Drinking water originates from many places (i.e., oceans, rivers, lakes, streams, ponds, reservoirs, springs, wells, etc. . .), sometimes traveling great distances before reaching its final destination. As a result, water collects a variety of substances or contaminants on its journey. Some of these contaminants are:

NTU-Nephelometric Turbidity Units, Turbidity units are a measure of the cloudiness of water.

Parts per Million(ppm)or milligrams per liter(mg/l)-one part per million corresponds to one minute in two years or one penny in \$10,000.

Parts per Billion(ppb)or Micrograms per liter- one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Microbial contaminants, such as viruses, bacteria and other pathogens which may come from septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

All drinking water, including bottled water, may reasonably contain small amounts of these contaminants. In accordance with state and federal law, the City Of Newton Water Treatment Plant routinely monitors drinking water for these types of contaminants.

For Your Information

The EPA prescribes regulations limiting the amount of certain contaminants in drinking water. To this end, the EPA sets Maximum Contaminant Level Goals (MCLG) and Maximum Contaminant Levels (MCL) to ensure your tap water is safe to drink. The Maximum Contaminant Level Goal is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety. The MCL is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for the public health.

Special Concerns

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care provider.

Cautionary Health Statement: Be Advised

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. **Note: Newton's water has considerably less than 10 ppm Nitrate. (<1.00 ppm Nitrate)**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. **Note: Newton's water has significantly less than the action level. The last testing was in the year 2003 and will be repeated in the year 2006.**

Additional information regarding contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (1-800-426-4791).

Detected Substances in Newton's Water

Table 1. Primary Substances Regulated at the Treatment Plant

Substance	Newton Result	Highest Level Allowed (MCL)	Ideal Goal MCLG	Major Source
Barium (ppm)	<0.4 mg/l	2 mg/l	2 mg/l	Erosion of natural deposits

Fluoride (ppm)	0.95 mg/l	4 mg/l	4 mg/l	Water additive which promotes strong teeth; Erosion of natural deposits
Nitrate (ppm)	<1.0 mg/l	10 mg/l	10 mg/l	Leaching from septic tanks, sewage; Erosion of natural deposits. Run-off from fertilizer use.
Turbidity ntu (turbidity units)	All below < .3 NTU	*Treatment technique	<.3 NTU	Soil runoff

* A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Table 2. Substances Regulated in the Distribution System

Substance	Result-	Range	Highest Level	Ideal Goal	Major Sources
TTHM (ppb)	Average for year 38.99 ppb	11 to 101 ppb	101 ppm 3 rd quarter 2003	<80 ppb yearly average	Chlorination of water
Haloacetic Acids (HAA5) 2003	58.444 ppb yearly avg.	15.5-109.7 ppb	110 ppb 3 rd quarter	<60 ppb yearly average	Chlorination of water
Total organic carbon	Raw 1.68 ppm Filtered <1.0 ppm	1.68ppm-<1.0ppm	1.68 ppm (river source)	< 2.0 ppm	Decomposition of organics
Copper (ppm) Tested in 2003 90 th percentile	0.186 (ppm) detected	Range 0.208-<0.05 ppm	*Action level=1.3 (ppm)	<1.3 (ppm)	Corrosion of copper pipes
Lead (ppb) Tested in June of 2003	All test were less than <0.003 ppm	All less than <0.003 ppb	*Action level=15 (ppb)	0	Corrosion of household plumbing systems, erosion of natural deposits

ARSENIC	LESS THAN <0.005PPM	NOT DETECTED	NOT DETECTED	NON	FOUND IN SOIL
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*An action level is the concentration of a contaminant, which, if exceeded, triggers treatment, or other requirements, which a water system must follow.

Table 3. Unregulated Volatile Organic Chemicals

Substance	Level Detected	Violation
Chloroform (ppb)	11.0ppb	No
Bromodichloromethane(ppb)	2.33ppb	No

This CCR was prepared by Tim Abernethy for the City Of Newton.

Tim Abernethy is the ORC at the Newton Water Plant and any questions or comments can be directed to him at the Newton water Plant ph. 695-4312

City Of Newton Web site:: <http://www.ci.newton.nc.us/>. The City of Newton has also finished a Source Water Assessment report or (SWAP).

This report tells of where our water originates and what is done to protect your drinking water . This can also be found at the Newton web site by

clicking on the SWAP button.